Research Note

DOT HS 810 686

Alcohol-Related Fatalities and Fatality Rates by State, 2004-2005

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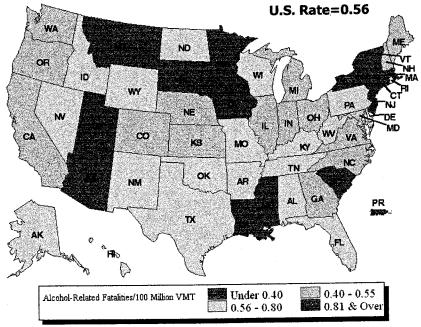
Summary

In 2005, while the overall fatality rate increased marginally to 1.45 from 1.44 fatalities per 100 million vehicle miles of travel (VMT) in 2004, the alcohol-related fatality rate declined to 0.56 from 0.57 fatalities per 100 million VMT. The fatality rate in crashes involving at least one driver or motorcycle operator who had a blood alcohol concentration (BAC) of .08 or above - the illegal per se level in all States -- declined to 0.43 in 2005 from 0.44 fatalities per 100 million VMT in 2004. In 2005, the alcohol-related fatality rate per 100 million VMT declined from 2004 in a total of 25 States and Puerto Rico and remained flat or increased in 25 States and the District of Columbia. The fatality rate in crashes involving at least one driver or motorcycle operator who had a BAC of .08 or above declined in 23 States and Puerto Rico, and remained flat or increased in 27 States and the District of Columbia.

Results

The note uses the 2004 Final and 2005 Annual Report File (ARF) of NHTSA's Fatality Analysis Reporting System (FARS) as well as the VMT data that were released by the FHWA in November 2006 to compute the rate of alcohol-related fatalities. Estimates of alcohol involvement are generated using BAC values reported to FARS and imputed BAC values when they are not reported. Fatalities are alcohol-related if they occur in crashes involving at least one driver, motorcycle operator, pedestrian, or pedalcyclist with a BAC of .01 or above. Also, since most impaired-driving laws target drivers and motorcycle operators, fatalities that occur in crashes that involve at least one driver or motorcycle operator with a BAC of .08 or above are also presented. Figure 1 maps the rate of alcohol-related fatalities per 100 million VMT for each State in 2005. The States are color coded as to whether their rates are at or above (yellow, red) the national rate of 0.56 or below (blue, green).

Figure 1: Alcohol-Related Fatalities Per 100 Million VMT by State, 2005

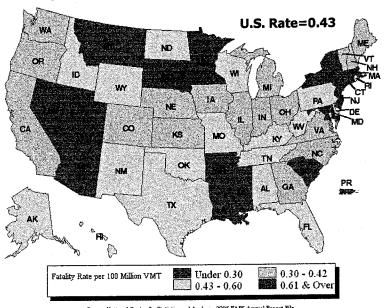


Source: National Center for Statistics and Analysis, 2005 FARS Annual Report File

Figure 2 maps the rate of fatalities in crashes that involved at least one driver or motorcycle operator with a BAC of .08 or above.

The States are color coded as to whether their rates are at or above (yellow, red) the national rate of 0.43 or below (blue, green).

Figure 2: Fatalities Per 100 Million VMT in Crashes Involving at Least One Driver or Motorcycle Operator With a BAC of .08 or Above, by State, 2005



Source: National Center for Statistics and Analysis, 2005 FARS Annual Report File

As shown in the Table 1, in the 25 States that showed a decrease in their alcohol-related fatality rates, there were 642 fewer alcohol-related fatalities in 2005. This however, was offset by an increase of 609 fatalities for the 25 States and the District of Columbia that showed an increase in their alcohol-

related fatality rate in 2005. In crashes involving at least one driver or motorcycle operator with a BAC of .08 or above, the 23 States had 593 fewer fatalities which were offset by an increase of 439 fatalities in the 27 States and the District of Columbia where the rate was flat or higher in 2005 as compared to 2004.

2005 Rates as compared to 2004 Rates	Alcohol-Rela	ted Fatalities	Fatalities in Crashes Involving at Least One Driver/Motorcycle Operator with BAC=.08+			
2004 Rates	Number of States	Change in Fatalities	Number of States	Change in Fatalities		
States with Higher/Flat Rates	25 + D.C.	+609	27 + D.C.	+439		
States with Lower Rates	25	-642	23	-593		
U.S.		-34	-	-154		

Table 2 (overleaf) depicts the number and rate of fatalities per 100 Million VMT in all crashes, alcohol-related crashes and

crashes that involved at least one driver or motorcycle operator had a BAC of .08 or above.

Table 2: Total, Alcohol-Related Fatalities, Fatalities in Crashes Involving at Least One Driver/Motorcycle Operator with a BAC of .08 or Above and the Corresponding Fatality Rates per 100 Million VMT, 2004-2005

State	2004						2005						
	Total		Alcohol-Related		In Crashes Involving at least one Driver /MC Operator with BAC=.08+		Total		Alcohol-Related		In Crashes Involving at least one Driver /MC Operator with BAC=.08+		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Alabama	1,154	1.95	432	0.73	360	0.61	1,131	1.90	423	0.71	358	0.60	
Alaska	101	2.02	31	0.62	- 27	0.54	72	1.43	35	0.70	27	0.54	
Arizona	1,151	2.01	446	0.78	334	0.58	1,177	1.97	492	0.82	362	0.61	
Arkansas	703	2.22	264	0.83	201	0.64	648	2.03	233	0.73	195	0.61	
California	4,120	1.25	1,667	0.51	1,179	0.36	4,329	1.31	1,719	0.52	1,250	0.38	
Colorado	667	1.45	265	0.58	200	0.44	606	1.26	244	0.51	198	0.41	
Connecticut	294	0.93	131	0.41	112	0.35	274	0.87	120	0.38	91	0.29	
Delaware	134	1,44	51	0.55	39	0.42	134	1.41	66	0.69	53	0.50	
District of Columbia	43	1.15	19	0.51	13	0.35	48	1.29	26	0.70	17	0.46	
Florida	3,244	1.65	1,244	0.63	886	0.45	3,543	1.76	1,471	0.73	1,023	0.5	
Georgia	1,634	1.44	536	0.47	403	0.35	1,729	1.52	545	0.48	413	0.30	
Hawaii	142	1.46	64	0.66	44	0.45	140	1.39	71	0.70	53	0.50	
Idaho	260	1.77	93	0.63	76	0.52	275	1.85	89 	0.60	82 440	0.55	
Illinois	1,355	1.24	613	0.56	475	0.44	1,361	1.26	580	0.54	440	0,4	
Indiana	947	1.30	304	0.42	241	0.33	938	1.31	320	0.45	253	0.3	
Iowa	388	1.23	111	0.35	87	0.28	450	1.45	118	0.38	96	0.31	
Kansas	459	1.57	139	0.48	113	0.39	428	1.44	151	0.51	115	0.39 0.52	
Kentucky	964	2.04	307	0.65	256	0.54	985	2.08	313	0.66	246	0.52	
Louisiana	927	2.08	424	0.95	315	0.71	955	2.12	394	0.88	309 49	0.3	
Maine	194	1.30	70	0.47	57	0.38	169	1.13	59	0.40	altition parties, and projection assures an en-	a New Colonia was 1 for all over-	
Maryland	643	1.16	286	0.52	211	0.38	614	1.09	235	0.42	161	0.29	
Massachusetts	476	0.87	207	0.38	169	0.31	442	0.80	171	0.31	134	0.24	
Michigan	1,159	1.12	431	0.42	329	0.32	Marine Commission of the Commission of	1.09	421	0.40	312 163	0.30 0.29	
Minnesota	567	1.00	191	0.34	156	0.28	559	0.98	201	0.35	302	0.7	
Mississippi	900	2.28	352	0.89	312	0.79	931	2.21	371	0.88	302 398	0.7	
Missouri	1,130	1.64	460	0.67	369	0.53	1,257	1.83	515 124	0.75	105	0.9	
Montana	229	2.04	105	0.94	97	0.87	251	2.26	124	1.11	76	0.39	
Nebraska	254	1.32	92	0.48	74	0.39	276	1.43	91	0.47 0.77	76 126	0.5	
Nevada	395	1.95	154	0.76	112	0.55	 A contract to a superior contract of the contract	2.06	159 60	0.77	120 54	0.4	
New Hampshire	171	1.26	59	0.44	51	0.38	and the second s	1.24	sasangan mengulah dalam terda	0.45	180	0.24	
New Jersey	723	0.99	270	0.37	185	0.25	research and accurately the Confession of	1.01	263 189	0.30	143	0.60	
New Mexico	521	2.18	213	0.89	157	0.66	- Alder Mark roughts and order was passed to	2.04	524	0.79	358	0.20	
New York	1,495	1.08	594	0.43	435	0.32	Commission and Advanced Com-	1.04	549	0.54	414	0.4	
North Carolina	1,573	1.64	549	0.57	423	0.44	1,534	1.51	58	0.77	45	0.59	
North Dakota	100	1.32	39	0.51	34	0.45	123	1.62 1.20	505	0.77	385	0.3	
Ohio	1,286	1.15	492	0.44	392	0.35		Charles Charles Charles	283	0.60	231	0.49	
Oklahoma	774	1.67	282	0.61	225	0.48	eren is announced with a STATE of Allies	1.71	203 177	0.50	121	0.3	
Oregon	456	1.28	204	0.57	150	der to a manufacture of	and the state of the state of the	1.38	636	0.59	523	0.4	
Pennsylvania	1,490	1.38	616	nas value com assista de constitui	517	0.48	化物 把 医硫酸甲磺胺酚 帽帽鞋 有相处	1.50 1.05	43	0.52	29	0.3	
Rhode Island	83	0.98	43	0.51	38	Charact for several endines	diamental to the Alexander and the Santal	2.21	464	0.32	359	0.7	
South Carolina	1,046	2.11	463	0.93	368	o neutro-provintina del Provinti Conc. 19	Transport Control of the State of Control of Con-	A AND THE RESERVE OF THE PARTY OF THE	80	0.95	69	0.8	
South Dakota	197	2.24	83	News Court Control and Control and	71 420	Miller New York represented to an experien-	enter in entire in reger to a mental and a service consistence	2.22	464	0.66	371	0.5	
Tennessee	1,339	1.89	542	vintario di provincio della STAGRACIO	439	tas industrialisti (240 mm) 74	actional volumes, his fait fifth	1.79 1.49	1,569	0.67	1,224	0.5	
Texas	3,699	1.60	1,704 	and the second second second	1,336		16 NOTES TO SERVICE TO SERVICE TO	1.12	37	0.07	33	0.1	
Utah	296	1.20	75		67 20	suppressing the second section of the second	CONTRACTOR OF THE STATE OF THE STATE OF	consideration and the constant	29	0.13	28	0.3	
Vermont	98	1.25	and district and an extension of the second	entre entre de la participa de la contraction de	20	policie e una recisio de recognica de	editions of a the relative at the	0.95 1.18	29 347	0.38	263	0.3	
Virginia	922	1.17	363	Company of the Compan	288	associate to search of call of city	record in the strategy and the second	1.18	347 294	0.53	235	0.4	
Washington	567	1.02	estado començar, per el estado	farther to a decrease accepture of	202	austro attarez d'usu si	Capital Service Springer Company	1.17	126	0.53	108	0.5	
West Virginia	410	2.02	anne e ancominación sur	control one form with \$7.50 co.	108	arrena incremia establishen f.	and recognic reason W90040 F100 He	1.82	369	0.61	313	0.5	
Wisconsin	792	1.31	358	approximation continues continue	specification of productions	Management of the control of the same	en elle even automobile even en en en en	1.88	65	0.72	Activities the property of the control	0.6	
Wyoming	164	1.77	59	cercura y mario, percentara	a minimum, and payment against the	remember remain (CSS)		eleganism in wait to white	16,885	0.72	12,945	0.4	
U.S.	42,836	1.44	16,919		Contract the second		o investment and transfer a con-	1.45 2.33	10,005	1.12	random field file. I make a reference and the	0.7	
Puerto Rico	495	2.54	250	1.28	174				217 ed on 2004	and the second s	Annual Control of the	Committee of the Commit	

Conclusions

In 2005, the alcohol-related fatality rate declined to 0.56 fatalities per 100 million VMT from 0.57 fatalities per 100 Million VMT in 2004. Impaired-driving laws have been enacted in all 50 States and the District of Columbia which makes it illegal for a driver or a motorcycle operator with a BAC of .08 or above to drive a vehicle. The fatality rate in crashes that involved at least one driver or motorcycle operator with a BAC of .08 or above also declined from 0.44 fatalities per 100 million VMT in 2004 to 0.43 fatalities per 100 million VMT in 2005. In 2005, Montana had the highest alcoholrelated fatality rate in the Nation - 1.11 per 100 Million VMT while Utah had the lowest rate in the Nation -0.15 per 100million VMT. In 2004, Louisiana had the highest rate of alcohol-related fatalities in the Nation - 0.95 fatalities per 100 million VMT; while Utah had the lowest rate - 0.30 fatalities per 100 million VMT. In crashes involving at least one driver or motorcycle operator with a BAC of .08 or above in 2005, Montana had the highest fatality rate - 0.94 fatalities per 100 million VMT; while Utah had the lowest fatality rate - 0.13 fatalities per 100 million VMT. Correspondingly, in 2004, Montana had the highest rate - 0.87 per 100 million VMT; while New Jersey and Vermont had the lowest rate - 0.25 fatalities per 100 million VMT.